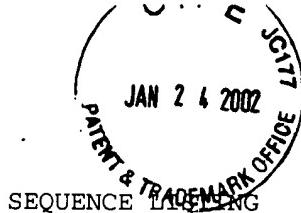


FEB 04 2002

SEARCH CENTER 1600/2900



<110> Cashman, Neil
Paramithiotis, Eustache
Slon-Usakiewicz, Jacek
Haghighat, Ashkan
Pinard, Marc
Lawton, Trebor

<120> PRION PROTEIN PEPTIDES AND USES THEREOF

<130> 50111/002002

<140> US 09/602,775
<141> 2000-06-23

<150> 60/140,634
<151> 1999-06-23

<160> 34

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(4)
<223> Xaa = Any Amino Acid

<400> 1
Xaa Tyr Tyr Xaa
1

<210> 2
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(7)
<223> Xaa = Any Amino Acid

<400> 2
Xaa Tyr Tyr Xaa Tyr Tyr Xaa

1

5

<210> 3
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(10)
<223> Xaa = Any Amino Acid

<400> 3
Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10

<210> 4
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(13)
<223> Xaa = Any Amino Acid

<400> 4
Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10

<210> 5
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(16)
<223> Xaa = Any Amino Acid

<400> 5
Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15

<210> 6
<211> 19

<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(19)
<223> Xaa = Any Amino Acid

<400> 6
Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Xaa
1 5 10 15
Tyr Tyr Xaa

<210> 7
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(22)
<223> Xaa = Any Amino Acid

<400> 7
Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr Tyr Xaa
20

<210> 8
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(25)
<223> Xaa = Any Amino Acid

<400> 8
Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
20 25

<210> 9

<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(28)
<223> Xaa = Any Amino Acid

<400> 9
Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
20 25

<210> 10
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(31)
<223> Xaa = Any Amino Acid

<400> 10
Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa
20 25 30

<210> 11
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(34)
<223> Xaa = Any Amino Acid

<400> 11
Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr
20 25 30
Tyr Xaa

<210> 12
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(4)
<223> Xaa = Any Amino Acid

<400> 12
Xaa Tyr Tyr Arg
1

<210> 13
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(4)
<223> Xaa = Any Amino Acid

<400> 13
Xaa Tyr Tyr Gln
1

<210> 14
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(4)
<223> Xaa = Any Amino Acid

<400> 14
Xaa Tyr Tyr Asp
1

<210> 15
<211> 13
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(13)
<223> Xaa = Any Amino Acid

<400> 15
Xaa Tyr Tyr Xaa Xaa Tyr Tyr Xaa Tyr Tyr Tyr Tyr Xaa
1 5 10

<210> 16
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(16)
<223> Xaa = Any Amino Acid

<400> 16
Xaa Tyr Tyr Xaa Xaa Tyr Tyr Xaa Tyr Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15

<210> 17
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(19)
<223> Xaa = Any Amino Acid

<400> 17
Xaa Tyr Tyr Xaa Xaa Tyr Tyr Xaa Tyr Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa

<210> 18
<211> 22
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(22)
<223> Xaa = Any Amino Acid

<400> 18
Xaa Tyr Tyr Xaa Xaa Tyr Tyr Xaa Tyr Tyr Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr Tyr Xaa
20

<210> 19
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(25)
<223> Xaa = Any Amino Acid

<400> 19
Xaa Tyr Tyr Xaa Xaa Tyr Tyr Xaa Tyr Tyr Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
20 25

<210> 20
<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(28)
<223> Xaa = Any Amino Acid

<400> 20
Xaa Tyr Tyr Xaa Xaa Tyr Tyr Xaa Tyr Tyr Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa Tyr Tyr Xaa
20 25

<210> 21
<211> 31
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(31)
<223> Xaa = Any Amino Acid

<400> 21
Xaa Tyr Tyr Xaa Xaa Tyr Tyr Xaa Tyr Tyr Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa
20 25 30

<210> 22
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(34)
<223> Xaa = Any Amino Acid

<400> 22
Xaa Tyr Tyr Xaa Xaa Tyr Tyr Xaa Tyr Tyr Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr
20 25 30
Tyr Xaa

<210> 23
<211> 37
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<221> VARIANT
<222> (1)...(37)
<223> Xaa = Any Amino Acid

<400> 23
Xaa Tyr Tyr Xaa Xaa Tyr Tyr Xaa Tyr Tyr Tyr Tyr Xaa Tyr Tyr Xaa
1 5 10 15
Tyr Tyr Xaa Tyr
20 25 30
Tyr Xaa Tyr Tyr Xaa
35

<210> 24
<211> 40
<212> PRT
<213> Artificial Sequence

<220>

<223> Synthetic peptide

<221> VARIANT

<222> (1)...(40)

<223> Xaa = Any Amino Acid

<400> 24

Xaa	Tyr	Tyr	Xaa	Xaa	Tyr	Tyr	Xaa	Tyr	Tyr	Tyr	Xaa	
1			5			10				15		
Tyr	Tyr	Xaa	Tyr									
20				25				30				
Tyr	Xaa	Tyr	Tyr	Xaa	Tyr	Tyr	Xaa					
35				40								

<210> 25

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic peptide

<221> VARIANT

<222> (1)...(10)

<223> Xaa = Any Amino Acid

<400> 25

Xaa	Tyr	Tyr	Arg	Arg	Tyr	Tyr	Arg	Tyr	Tyr	
1			5			10				

<210> 26

<211> 264

<212> PRT

<213> Bos taurus

<400> 26

Met	Val	Lys	Ser	His	Ile	Gly	Ser	Trp	Ile	Leu	Val	Leu	Phe	Val	Ala
1					5				10				15		

Met	Trp	Ser	Asp	Val	Gly	Leu	Cys	Lys	Lys	Arg	Pro	Lys	Pro	Gly	Gly
						20		25				30			

Gly	Trp	Asn	Thr	Gly	Gly	Ser	Arg	Tyr	Pro	Gly	Gln	Gly	Ser	Pro	Gly
						35		40			45				

Gly	Asn	Arg	Tyr	Pro	Pro	Gln	Gly	Gly	Gly	Trp	Gly	Gln	Pro	His	
						50		55			60				

Gly	Gly	Gly	Trp	Gly	Gln	Pro	His	Gly	Gly	Gly	Trp	Gly	Gln	Pro	His
						65		70			75			80	

Gly	Gly	Gly	Trp	Gly	Gln	Pro	His	Gly	Gly	Gly	Trp	Gly	Gln	Pro	His
						85		90			95				

Gly	Gly	Gly	Trp	Gly	Gln	Gly	Gly	Thr	His	Gly	Gln	Trp	Asn	Lys	
						100		105			110				

Pro	Ser	Lys	Pro	Lys	Thr	Asn	Met	Lys	His	Val	Ala	Gly	Ala	Ala	Ala
						115		120			125				

Ala	Gly	Ala	Val	Val	Gly	Gly	Leu	Gly	Gly	Tyr	Met	Leu	Gly	Ser	Ala
					130		135			140					

Met Ser Arg Pro Leu Ile His Phe Gly Ser Asp Tyr Glu Asp Arg Tyr
 145 150 155 160
 Tyr Arg Glu Asn Met His Arg Tyr Pro Asn Gln Val Tyr Tyr Arg Pro
 165 170 175
 Val Asp Gln Tyr Ser Asn Gln Asn Asn Phe Val His Asp Cys Val Asn
 180 185 190
 Ile Thr Val Lys Glu His Thr Val Thr Thr Lys Gly Glu Asn
 195 200 205
 Phe Thr Glu Thr Asp Ile Lys Met Met Glu Arg Val Val Glu Gln Met
 210 215 220
 Cys Ile Thr Gln Tyr Gln Arg Glu Ser Gln Ala Tyr Tyr Gln Arg Gly
 225 230 235 240
 Ala Ser Val Ile Leu Phe Ser Ser Pro Pro Val Ile Leu Leu Ile Ser
 245 250 255
 Phe Leu Ile Phe Leu Ile Val Gly
 260

<210> 27
 <211> 253
 <212> PRT
 <213> Homo sapiens

<400> 27

Met Ala Asn Leu Gly Cys Trp Met Leu Val Leu Phe Val Ala Thr Trp
 1 5 10 15
 Ser Asp Leu Gly Leu Cys Lys Lys Arg Pro Lys Pro Gly Gly Trp Asn
 20 25 30
 Thr Gly Gly Ser Arg Tyr Pro Gly Gln Gly Ser Pro Gly Gly Asn Arg
 35 40 45
 Tyr Pro Pro Gln Gly Gly Gly Trp Gly Gln Pro His Gly Gly Gly
 50 55 60
 Trp Gly Gln Pro His Gly Gly Trp Gly Gln Pro His Gly Gly Gly
 65 70 75 80
 Trp Gly Gln Pro His Gly Gly Trp Gly Gln Gly Gly Thr His
 85 90 95
 Ser Gln Trp Asn Lys Pro Ser Lys Pro Lys Thr Asn Met Lys His Met
 100 105 110
 Ala Gly Ala Ala Ala Ala Gly Ala Val Val Gly Gly Leu Gly Gly Tyr
 115 120 125
 Met Leu Gly Ser Ala Met Ser Arg Pro Ile Ile His Phe Gly Ser Asp
 130 135 140
 Tyr Glu Asp Arg Tyr Tyr Arg Glu Asn Met His Arg Tyr Pro Asn Gln
 145 150 155 160
 Val Tyr Tyr Arg Pro Met Asp Glu Tyr Ser Asn Gln Asn Asn Phe Val
 165 170 175
 His Asp Cys Val Asn Ile Thr Ile Lys Gln His Thr Val Thr Thr
 180 185 190
 Thr Lys Gly Glu Asn Phe Thr Glu Thr Asp Val Lys Met Met Glu Arg
 195 200 205
 Val Val Glu Gln Met Cys Ile Thr Gln Tyr Glu Arg Glu Ser Gln Ala
 210 215 220
 Tyr Tyr Gln Arg Gly Ser Ser Met Val Leu Phe Ser Ser Pro Pro Val
 225 230 235 240
 Ile Leu Leu Ile Ser Phe Leu Ile Phe Leu Ile Val Gly
 245 250

<210> 28

<211> 256
<212> PRT
<213> Ovis aries

<400> 28

Met	Val	Lys	Ser	His	Ile	Gly	Ser	Trp	Ile	Leu	Val	Leu	Phe	Val	Ala
1		5				10					15				
Met	Trp	Ser	Asp	Val	Gly	Leu	Cys	Lys	Lys	Arg	Pro	Lys	Pro	Gly	Gly
	20					25					30				
Gly	Trp	Asn	Thr	Gly	Gly	Ser	Arg	Tyr	Pro	Gly	Gln	Gly	Ser	Pro	Gly
	35					40					45				
Gly	Asn	Arg	Tyr	Pro	Pro	Gln	Gly	Gly	Gly	Trp	Gly	Gln	Pro	His	
	50					55					60				
Gly	Gly	Gly	Trp	Gly	Gln	Pro	His	Gly	Gly	Gly	Trp	Gly	Gln	Pro	His
	65					70					75				80
Gly	Gly	Gly	Trp	Gly	Gln	Pro	His	Gly	Gly	Gly	Trp	Gly	Gln	Gly	
	85					90					95				
Gly	Ser	His	Ser	Gln	Trp	Asn	Lys	Pro	Ser	Lys	Pro	Lys	Thr	Asn	Met
	100					105					110				
Lys	His	Val	Ala	Gly	Ala	Ala	Ala	Gly	Ala	Val	Val	Gly	Gly	Leu	
	115					120					125				
Gly	Gly	Tyr	Met	Leu	Gly	Ser	Ala	Met	Ser	Arg	Pro	Leu	Ile	His	Phe
	130					135					140				
Gly	Asn	Asp	Tyr	Glu	Asp	Arg	Tyr	Tyr	Arg	Glu	Asn	Met	Tyr	Arg	Tyr
	145					150					155				160
Pro	Asn	Gln	Val	Tyr	Tyr	Arg	Pro	Val	Asp	Arg	Tyr	Ser	Asn	Gln	Asn
						165					170				175
Asn	Phe	Val	His	Asp	Cys	Val	Asn	Ile	Thr	Val	Lys	Gln	His	Thr	Val
						180					185				190
Thr	Thr	Thr	Thr	Lys	Gly	Glu	Asn	Phe	Thr	Glu	Thr	Asp	Ile	Lys	Ile
						195					200				205
Met	Glu	Arg	Val	Val	Glu	Gln	Met	Cys	Ile	Thr	Gln	Tyr	Gln	Arg	Glu
	210					215					220				
Ser	Gln	Ala	Tyr	Tyr	Gln	Arg	Gly	Ala	Ser	Val	Ile	Leu	Phe	Ser	Ser
	225					230					235				240
Pro	Pro	Val	Ile	Leu	Leu	Ile	Ser	Phe	Leu	Ile	Phe	Leu	Ile	Val	Gly
						245					250				255

<210> 29
<211> 254
<212> PRT
<213> Mus musculus

<400> 29

Met	Ala	Asn	Leu	Gly	Tyr	Trp	Leu	Leu	Ala	Leu	Phe	Val	Thr	Met	Trp
1		5			10						15				
Thr	Asp	Val	Gly	Leu	Cys	Lys	Lys	Arg	Pro	Lys	Pro	Gly	Gly	Trp	Asn
	20					25					30				
Thr	Gly	Gly	Ser	Arg	Tyr	Pro	Gly	Gln	Gly	Ser	Pro	Gly	Gly	Asn	Arg
	35					40					45				
Tyr	Pro	Pro	Gln	Gly	Gly	Thr	Trp	Gly	Gln	Pro	His	Gly	Gly	Gly	Trp
	50					55					60				
Gly	Gln	Pro	His	Gly	Gly	Ser	Trp	Gly	Gln	Pro	His	Gly	Gly	Ser	Trp
	65					70					75				80
Gly	Gln	Pro	His	Gly	Gly	Trp	Gly	Gln	Gly	Gly	Gly	Thr	His	Asn	
						85					90				95
Gln	Trp	Asn	Lys	Pro	Ser	Lys	Pro	Lys	Thr	Asn	Leu	Lys	His	Val	Ala
						100					105				110

Gly Ala Ala Ala Ala Gly Ala Val Val Gly Gly Leu Gly Gly Tyr Met
115 120 125
Leu Gly Ser Ala Met Ser Arg Pro Met Ile His Phe Gly Asn Asp Trp
130 135 140
Glu Asp Arg Tyr Tyr Arg Glu Asn Met Tyr Arg Tyr Pro Asn Gln Val
145 150 155 160
Tyr Tyr Arg Pro Val Asp Gln Tyr Ser Asn Gln Asn Asn Phe Val His
165 170 175
Asp Cys Val Asn Ile Thr Ile Lys Gln His Thr Val Thr Thr Thr
180 185 190
Lys Gly Glu Asn Phe Thr Glu Thr Asp Val Lys Met Met Glu Arg Val
195 200 205
Val Glu Gln Met Cys Val Thr Gln Tyr Gln Lys Glu Ser Gln Ala Tyr
210 215 220
Tyr Asp Gly Arg Arg Ser Ser Ser Thr Val Leu Phe Ser Ser Pro Pro
225 230 235 240
Val Ile Leu Leu Ile Ser Phe Leu Ile Phe Leu Ile Val Gly
245 250

<210> 30
<211> 254
<212> PRT
<213> Mesocricetus auratus

<400> 30
Met Ala Asn Leu Ser Tyr Trp Leu Leu Ala Leu Phe Val Ala Met Trp
1 5 10 15
Thr Asp Val Gly Leu Cys Lys Lys Arg Pro Lys Pro Gly Gly Trp Asn
20 25 30
Thr Gly Gly Ser Arg Tyr Pro Gly Gln Gly Ser Pro Gly Gly Asn Arg
35 40 45
Tyr Pro Pro Gln Gly Gly Thr Trp Gly Gln Pro His Gly Gly Gly
50 55 60
Trp Gly Gln Pro His Gly Gly Trp Gly Gln Pro His Gly Gly Gly
65 70 75 80
Trp Gly Gln Pro His Gly Gly Trp Gly Gln Gly Gly Thr His
85 90 95
Asn Gln Trp Asn Lys Pro Ser Lys Pro Lys Thr Asn Met Lys His Met
100 105 110
Ala Gly Ala Ala Ala Gly Ala Val Val Gly Gly Leu Gly Gly Tyr
115 120 125
Met Leu Gly Ser Ala Met Ser Arg Pro Met Met His Phe Gly Asn Asp
130 135 140
Trp Glu Asp Arg Tyr Tyr Arg Glu Asn Met Asn Arg Tyr Pro Asn Gln
145 150 155 160
Val Tyr Tyr Arg Pro Val Asp Gln Tyr Asn Asn Gln Asn Asn Phe Val
165 170 175
His Asp Cys Val Asn Ile Thr Ile Lys Gln His Thr Val Thr Thr Thr
180 185 190
Thr Lys Gly Glu Asn Phe Thr Glu Thr Asp Ile Lys Ile Met Glu Arg
195 200 205
Val Val Glu Gln Met Cys Thr Thr Gln Tyr Gln Lys Glu Ser Gln Ala
210 215 220
Tyr Tyr Asp Gly Arg Arg Ser Ser Ala Val Leu Phe Ser Ser Pro Pro
225 230 235 240
Val Ile Leu Leu Ile Ser Phe Leu Ile Phe Leu Met Val Gly
245 250

<210> 31
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 31
Tyr Tyr Arg Arg Tyr Tyr Arg Tyr Tyr
1 5

<210> 32
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 32
Cys Tyr Tyr Arg
1

<210> 33
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 33
Cys Tyr Tyr Arg Arg Tyr Tyr Arg Tyr Tyr
1 5 10

<210> 34
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic peptide

<400> 34
Cys Lys Tyr Glu Asp Arg Tyr Tyr Arg Glu
1 5 10